

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

AMENDMENTS TO THE CLAIMS

1 1. (canceled)

1 2. (canceled)

1 3. (canceled)

1 4. (canceled)

1 5. (canceled)

1 6. (canceled)

1 7. (canceled)

1 8. (canceled)

1 9. (canceled)

1 10. (canceled)

1 11. (canceled)

1 12. (canceled)

1 13. (canceled)

1 14. (canceled)

1 15. (canceled)

1 16. (canceled)

1 17. (canceled)

1 18. (previously presented) A method comprising:

2 automatically generating network site and site link information from a router

3 configuration file for use in a directory service, by

4 reading preprocessing information, the preprocessing information including override

5 information for nullifying information associated with one or more sites or

6 one or more site links from one or more router configuration files; and

7 reading router interface information from a router configuration file associated with

8 each of one or more routers, wherein one or more site references is generated

9 by identifying a sub-network on a Local Area Network (LAN) interface and

10 one or more site link references is generated by identifying a Wide Area

11 Network (WAN) interface and wherein the override information is applied to

12 the site and site link references,

13 wherein the step of reading preprocessing information comprises:

14 reading a list of one or more site names from a data storage associated with a

15 network management system;

16 reading from the data storage a list of one or more preprocessing site links and

17 associated site link costs;

18 comparing one or more site names parsed from the one or more preprocessing

19 site links to the list of one or more site names from the data storage

20 and discarding one or more preprocessing site links upon a failure to

21 match;

22 reading from the data storage a list of one or more preprocessing address
23 blocks and at least one from a set consisting of a preprocessing site
24 name associated with the one or more preprocessing address blocks or
25 a command to ignore the one or more preprocessing address blocks;
26 comparing the preprocessing site name associated with the one or more
27 preprocessing address blocks to the list of one or more site names
28 from the data storage and discarding one or more preprocessing
29 address blocks upon a failure to match;
30 reading a list of one or more domain controllers from the data storage and
31 associating the one or more domain controllers to an Internet Protocol
32 address and to a site name obtained from a network management
33 system;
34 determining a domain associated with the one or more domain controllers;
35 comparing the Internet Protocol address for each of the listed domain
36 controllers to the list of one or more preprocessing address blocks;
37 whereupon the step of reading preprocessing information aborts if the Internet
38 Protocol address is within one or more preprocessing address blocks
39 and the preprocessing site name associated with the one or more
40 preprocessing address blocks is not the same as the site name obtained
41 from the network management system that is associated with the one
42 or more domain controllers; and
43 whereupon the step of reading preprocessing information continues excluding
44 the one or more domain controllers from further processing if the

45 Internet Protocol address is within one or more preprocessing address
46 blocks associated with the command to ignore the one or more
47 preprocessing address blocks.

1 19. (original) The method of claim 18, further comprising steps of:
2 comparing an address of each of the one or more site references, one or more site link
3 references, and one or more sub-network references to the one or more
4 preprocessing address blocks;
5 deleting from processing the one or more site references, the one or more site link
6 references, and the one or more sub-network references having an address
7 being a subset or superset of the one or more preprocessing address blocks
8 and deleting from processing the partial site link associated with discontinued
9 one or more site link references; and
10 if the temporary site name contains no site references, deleting from processing the
11 temporary site name and associated one or more router names, partial site
12 links, site link references, and sub-network references.

1 20. (original) The method of claim 18, further comprising steps of:
2 merging one or more temporary site names and associated partial site links, site links,
3 sub-network references, and router names into one or more newly created
4 complete site names; and
5 deleting from processing the one or more temporary site names merged into the one
6 or more newly created complete site names, thereby reducing the quantity of

7 temporary site names and increasing the quantity of site references associated
8 with one or more temporary site names.

1 21. (original) The method of claim 18, further comprising steps of:
2 processing the one or more sub-network references to ensure that sub-network
3 references are not duplicated;
4 processing the one or more sub-network references to ensure that the network site
5 information is minimized; and
6 merging the one or more sub-network references associated with one or more
7 temporary site names into the one or more site references associated with the
8 same one or more temporary site names.

1 22. (original) The method of claim 18, further comprising a step of:
2 generating a site link between one or more temporary site names, comprising the
3 steps of
4 processing each partial site link associated with each of the one or more
5 temporary site names to generate a valid site link based on matching a
6 first partial site link associated with a first temporary site name with
7 only a second partial site link associated with a second temporary site
8 name,
9 reading a list of one or more site links to determine if an existing site link
10 between the first temporary site name and the second temporary site
11 name exists,

12 upon existence of an existing site link, comparing a bandwidth of the existing
13 site link to a bandwidth of the valid site link,
14 upon the bandwidths being equal, summing the bandwidths to create a
15 summed bandwidth and associating the summed bandwidth
16 with the existing site link and discarding the valid site link,
17 upon the bandwidths being unequal, maintaining the existing or valid
18 full site link with a larger bandwidth and discarding the other
19 of the existing or valid full site link,
20 upon non-existence of the existing full site link, generating a valid site link
21 between the first temporary site name and the second temporary site
22 name, the valid site link including a first partial site link associated
23 with the first temporary site name and a second partial site link
24 associated with the second temporary site name,
25 comparing the bandwidth of the first partial site link to the bandwidth
26 of the second partial site link, and
27 upon the bandwidths being equal, generating a first site link cost based
28 on the equal bandwidth and associating the first site link cost
29 with the valid site link,
30 upon the bandwidths being unequal, generating a second site link cost
31 based on the smaller bandwidth and associating the second site
32 link cost with the valid site link.

1 23. (original) The method of claim 18, further comprising steps of:

2 replacing one or more temporary site names with one or more domain controller site
3 names generated from an association of at least one listed domain controller
4 from the data storage and an Internet Protocol address of the domain
5 controller; and
6 comparing the one or more preprocessing site names to the one or more domain
7 controller site names;
8 upon a comparison match, merging the one or more preprocessing address blocks
9 associated with the one or more preprocessing site names with the one or
10 more domain controller site names and deleting from processing the one or
11 more preprocessing site names;
12 generating a single list of site names including the one or more temporary site names
13 and the one or more domain controller site names; and
14 ensuring that each site name is associated with another connected site name.

1 24. (canceled)

1 25. (canceled)

1 26. (canceled)

1 27. (canceled)

1 28. (canceled)

1 29. (canceled)

1 30. (canceled)

1 31. (canceled)

1 32. (canceled)

1 33. (new) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, cause the one or
3 more processors to perform the method recited in any one of Claims 18-23.

1 34. (new) A system comprising:
2 a network interface that is coupled to a network for receiving one or more packet
3 flows therefrom;
4 a processor;
5 one or more stored sequences of instructions which, when executed by the
6 processor, cause the processor to perform the method recited in any one of
7 Claims 18-23.

1 35. (new) An apparatus comprising means for performing the method recited in any
2 one of Claims 18-23.